

Title: Taking part counts: Adolescents' experiences of the transition from inactivity to active participation in school based physical education

Health Education Research (<http://her.oxfordjournals.org/>)

Brooks, F. and J. Magnusson, *Taking part counts: Adolescents' experiences of the transition from inactivity to active participation in school-based physical education*. Health Education Research: Special Edition Childhood Obesity, 2006. 21(6): p. 872-883.

Authors Contact details

Brooks, F CRIPACC, The University of Hertfordshire, Hatfield, AL10 9AB, UK

Magnusson, J CRIPACC, The University of Hertfordshire, Hatfield, AL10 9AB, UK

f.m.brooks@herts.ac.uk

Key Phrases: Adolescents and physical activity, Physical Education, Qualitative research, Focus groups, New social studies of childhood.

Abstract

Identifying ways to increase and sustain active living among young people represents a priority for health promotion interventions. This qualitative study explored the experiences of adolescent boys and girls in the UK (aged 14-15 years) who had made the transition from inactivity to active participation in physical education (PE).

The setting was a secondary school that had modified the physical education programme, with the aim of increasing participation rates. Thirty-one, self-identified, formerly 'PE averse' students were interviewed in focus groups in the school setting. Previously, respondents felt that they had been constructed as physically marginal individuals. Having a physically 'marginal body' was perceived as being detrimental to emotional health. The new PE resulted in respondents possessing a performing and achieving physical identity. Boys gained a sense of security in their physical identity and cultural change had removed the aggression from interacting with other physically active peers. Girls spoke of increased self-confidence, including acquiring the psychological resources to participate in community-based activities.

Effective health promotion interventions for inactive adolescents are likely to move beyond solely endorsing the benefits of physical activity or increasing choice and instead address the potential emotional risks and value of participation from the adolescents' perspective.

Taking part counts: Adolescents' experiences of the transition from inactivity to active participation in school based physical education

Introduction

Despite active lifestyles having an array of positive health and social benefits for young people, decreasing levels of physical activity among children and adolescents is rapidly becoming a global phenomenon [2-4].

Recent data shows that among UK 13-15 year olds, 30-40% of boys and 50-60% of girls do not undertake the recommended one hour of moderate physical activity per day [5, 6]. Identifying ways to increase and sustain active living by children and adolescents currently represents a priority area for health promotion interventions [7].

The root cause of inactivity has frequently been associated with an increase in sedentary activities such as computer games [8], coupled with a reduction in participation in school sports. Increasing the levels of physical education (PE) in schools has been perceived as one way of getting young people involved in physical activity [9]. Although PE has been squeezed in the curriculum, reduced participation levels in general cannot be simply equated with reduced availability of PE in school. As participation in physical activity moves from an adult structured and managed activity (either by schools or parents) to a choice activity, participation rates fall dramatically [10-12]. This decline is particularly evidenced in adolescent girls [13-15]. Work concerned with adolescent activity rates has identified facilitators and barriers to activity in adolescence as shaped by a complex inter relationship between personal identity and goals on the one hand and the degree of support from the social environment on the other [16, 17]. Although

attention has tended to focus on identifying adolescents as either active or inactive [18, 19], less is known about the perspectives and experiences of the adolescent who has successfully moved from inactivity to activity. Consideration of the views of adolescents, who have made the transition away from inactivity, provides a means of exploring the contribution of school based physical education as a health promotion strategy for young people. The possibility of adolescent-centred strategies for supporting participation in physical activity within schools, has been reflected in recent policy developments from the UK, that have highlighted the need for flexible, inclusive provision that provides a variety of activities [9, 20]. In terms of the strategies that educators and health promotion specialists might use in practice to evaluate and change PE delivery there are very few programmes that appear to consider the perspectives of the adolescent and involve young people in the implementation process. Although there are some exceptions for example; the Jumpstart Teen programme in the USA offers lesson plans that detail how to aide adolescents to understand their feelings about physical activity [21, 22].

Research has also indicated that motivating learning environments are important factors in encouraging PE participation[23]. In particular teaching styles that give young people influence and choice over the content of the lesson can have a positive impact on motivation and involvement in PE [24]. However, little is known about how young people might be experiencing changes in the PE curriculum or the impact of such changes on the adoption of active lifestyles.

Background and theoretical framework

Feminist work on sports participation and the new social studies of childhood both offer theoretical frameworks for understanding participation in physical activity during adolescence. The new social studies of childhood commences with the definition of the

child as an active social actor who has the ability to make sense of their own life, and employ those meanings to negotiate with and resist the surrounding adult world; including resisting being moulded towards the 'end goal of adult society,' [25-27]. Consequently, how young people understand health behaviour and undertake practices of health maintenance may be shaped by different interpretations and priorities to those of the adults in their lives [26], [25]. Viewing the child as a social actor and the attendant rejection of them as 'cultural dupes' [28] has implications for the development of health promotion strategies and the public health agenda in relation to the improvement of physical activity levels and the linked aims of a reduction in childhood obesity. In particular a rejection of the simplistic view that the cause of increasing inactivity is caused solely by young peoples' problematic lifestyles, as being too focused around adult defined damaging behaviours, such as computer game playing. Instead a more complex relationship needs to be considered, one where sedentary behaviours can compete with participation in physical activity, but can equally co-exist [29, 30]. Children are also embodied social actors, learning that part of their social value is conveyed through having bodies that are socially valued [26, 28]. The regimen of the school requires children to acquire 'docile bodies', but also to display performing, athletic, bodies during PE. Consequently the way PE is experienced by young people may have profound implications for their identity and sense of embodied selves. Moreover, adolescent identities cannot be assumed to be fixed as either active or inactive, but instead, are open to change as the young person negotiates and responds to alterations in activity provision and their social environment [31]. Feminist work has been particularly important for shifting concern away from girls as problem non-participants who do not wish to develop athletic bodies, to providing a critique of the gendered character and pedagogy of PE provision. Aspects of the PE curriculum have been shown to reinforce the construction of negative physical identities

for adolescent girls through less access and choice, hostile responses from boys and the dominance of a competitive discourse in pedagogy that did not support the development of their skills [31, 32]. Work on the construction of masculine identities has also highlighted the way PE education reinforces the formation of masculine identities based on physical prowess and competitiveness [33]. Less well understood is how masculine hegemony in sports and physical activity could be particularly problematic in school settings for some boys (such as boys who are disinterested in football), in relation to the construction of their physical identities [34]. Although adult men have been found to sustain a negative relationship to sport as a result of their experiences at school [35]. Finally, the conceptualisation 'of the child in time' as an individual and as a member of a specific generation[26], offers a means to understand young people as having health policy and practice needs beyond just developing their bodies into future 'healthy adults'. Overall, the recognition that children hold their own concepts about physical activity (including the health benefits of activity), which may stand in polar opposition to adult conceptualisations, creates an agenda for public health research and practice; an agenda where the child's perspective on their experiences necessarily becomes the central analytic task.

This article reports on a study that set out to explore the lived experiences of adolescent girls and boys (aged 14-15 years) who defined themselves as previously being 'PE adverse' but who had in the preceding year become actively involved in a range of physical activities provided by the school, including membership of the school football and netball teams and junior sports leadership programmes [36].

The study

The location of the study was a secondary school that had in the past 18 months made alterations in the delivery of PE education. The school was located in a sub-ward of significant deprivation and poor health status. The index of multiple deprivation (IMD) rated the ward with a high score of 28.06, and with a poor health domain score of + 0.33 (a score >0.10 is considered to constitute a poor health area). The ethnic composition of the area was primarily white in origin.

The adolescents who participated in the research all defined themselves as having been previously either actively resistant to participation in PE lessons or, having had an intense dislike of school PE, even if they attended lessons.

The specific aim of the new programme introduced in the school was to encourage greater participation in PE lessons. Teachers felt that they had successfully moved from a situation of almost non-existent participation in PE across the year group, to a situation where only 3-4 students remained as non-participants in the group. Modifications to the PE provision had been initiated after a new head of PE was appointed, who had been concerned about the low numbers of participants in PE lessons, especially among the girls. The changed programme involved the entire PE department plus any student teachers on placement, support was also provided by the head and deputy head teachers. Additional resources were provided for the employment of a part-time dance teacher, following requests from students. The development of the new PE programme involved consultation with the year group (then in year 8). The programme of change was initially devised by the teaching team who drew from the critiques of PE outlined by their students, especially girls. The changes to the PE provision initially involved year 8 (year 9 at the time of the research) and were subsequently rolled out to the whole

school. Explicit attempts were made to change both the form of provision (types of activities and extent of choice) and the culture (e.g. staff approaches to competitiveness) of the physical education, involving the following:

Giving young people control: Underpinning the strategies was an intention to involve the students in decision-making. Students re-designed the PE uniform and suggested new activities (such as dance, use of trampolines, gym sessions).

Changes to the physical environment: Small investments were made in terms of updating the equipment, design and decoration for the sports hall. Based on student feedback changes were also made to improve the experience of using the changing rooms, such as the provision of quality soap dispenser and shower gel so that girls in particular would find them pleasant environments.

Giving young people choice: Students were given choice over which part of the PE uniform they wore to lessons. Students were able to choose between activities and between an indoor or outdoor activity.

Empowerment: A number of strategies were designed to increase the physical confidence of students and to encourage participation, including a reward system for participation, such as an annual sporting 'proms' night held at a local hotel. The teaching staff made a conscious decision to shift the priorities of the PE department away from attaining sporting excellence to achieving broad based participation in the school teams.

If they are prepared to turn up for the training, then we play them. I have a couple of girls who turn up every week for netball. They aren't good and wouldn't get near your average school team. But we play them. Their loyalty and commitment needs to be valued. Even if that means we can't win. (PE Teacher)

The teachers stated that as a team they had made a cultural shift away from their traditional expectations as PE teachers, i.e. that they would strive for sporting excellence, and instead move to valuing and prioritising participation in physical activity. In order to put this strategy in place the support of the senior management team at the

school was required, as the result would be a reduction in success for the school in external sports competitions.

One of the good things is that I have the support of the senior management team, I have had to say to them, 'this school won't have a great big trophy cupboard from winning against other schools.' But they also believe that getting these kids active is more important. (Head of PE)

Methodology

Thirty-one students from year group nine (25 girls and 6 boys aged 14-15 years) who had made the transition from non-participation in PE to active participation were interviewed in 5 focus groups. The number of students in year nine was 163, with a total school population of 815 in school years 7-11. Teachers initially talked to students about the study and explained that the research was looking at the views of those who had been previously reluctant to participate in PE; students then self-selected to be included in the focus groups. All the young people self-identified as previously being 'PE adverse' that is, they 'avoided' participation or attendance in PE lessons. This was reported to have taken the form of 'forgetting' to bring their uniform on days when they had PE; bringing notes to say they were physically unable to participate (e.g. due to illness); or just standing around during lessons, not actively participating. They were at the time of the study all active participants, in terms of attending and taking part in all PE lessons, and were committed to additional involvement in either the school teams or the school dance group. In addition, the majority were also engaged in external community-based activities (the relationship between community based physical activity and PE is discussed later). The composition and numbers of the focus-groups was decided by the young people, thereby enabling them to control who they were interviewed with and to ensure that the research process did not provide an opportunity to intensify any

problematic relationships (such as bullying) within the year group. Smaller groups or paired interviews were also offered. The recruitment process resulted in mixed gender groups, with a majority of girls in each focus group. Prior to interview, students were introduced to us as researchers and we observed a single typical PE lesson, a dance lesson and a junior leadership session involving the adolescent students teaching primary school children in the use of trampolines. Students also provided us with a tour of the changing facilities and showed us the PE uniforms. In order to identify the character and process of implementing the modified PE curriculum three teachers within the PE team were interviewed, prior to speaking to the students. The observations of the students and the interviews with the teachers allowed insight into the operation of the new PE policy and generated concepts that informed the design of the interview schedules. During the observations young people were told about the research and asked for ideas and key concepts that would be useful to explore with focus-group respondents; this raised the importance of exploring the prom night, the value of the junior leadership programme and choice of activities.

The focus-group interviews with young people sought to elicit narratives and group discussion relating to: their perceptions and experience of PE before and after the implementation of the modified programme, the relationship to participation in external activities, the impact on their perceptions of self, their physical identity, peer relationships and future intentions. These themes were explored in all the focus groups, with specific probes relating to issues that were relevant to the thematic direction of the focus groups being followed-up with different groups for example, boys' attitudes to team sports.

All the interviews were taped and transcribed. Thematic coding was employed and themes were generated both inductively from the raw data and deductively employing the theoretical framework [37]. Two researchers coded all the transcripts separately,

data was categorised into initial and higher codes and repeatedly searched for disconfirming cases as part of the coding refinement process. Focus group interviews as a methodological tool offered a number of advantages for addressing the core aims and objectives. Foremost, they ensured that priority was given to uncovering each respondent's categorisation and language. In addition as a form of group interview, the focus groups enabled not just analysis of individual responses, but also consideration of the interactional features of the data [38]. The ability to gain interactional data is portrayed as a strength of focus-group interviews but rarely actually presented in the analysis [38] leading to a fragmented presentation of the data. The interactive nature of the interview creates a 'synergistic effect' [39] and allows for exploration of how groups of respondents construct hierarchies of categories and identification of the issues they collectively feel most strongly about. In this case, as we were working with existing peer groups (as opposed to focus-groups composed of randomly selected strangers) the interviews allowed for insights into group culture and norms, such as, the prevailing cultural attitudes towards those who were not high performing sporting individuals. Consequently, in undertaking the thematic coding (and in presenting the data in this article) attention was given to characterising individual and group utterances.

Ethical Considerations

Formal consent was gained from all the participants and parents were made aware of the study. Local ethical committee approval was granted for the study. All participants have been anonymised and pseudonyms used in the presentation of the data. Findings have been fed back to participants.

Findings

PE prior to change

The critique of traditional PE previously found in other research was strongly echoed by our respondents [31, 32, 35]. Prior to the changes made in their school, PE was perceived primarily as an aspect of the school that attempted to exert control over their bodies in ways that the participants reported finding stressful. The emphasis placed on controlling the presentation of their embodied selves through rules over use of showers, inflexible adherence to PE uniform and lack of choice over activities, resulted in such control being overtly visible to the participants and subject to strategies of resistance:

Sue: The previous teacher would come and check that we were in our towels and make us line up and touch our hair to see if it was wet. So we used to just flick water on our hair.

The previous PE regimen also caused the participants to present their bodies as one that was unsuitable for physical activity. This presentation of a physically 'sick body' was particularly strong in the accounts from the girls, for whom the old uniforms and hygiene regimens represented unacceptable regulation of their embodied selves. Consequently menstruation became a vehicle for the portrayal of a 'sick body'. Moreover as the following interaction illustrates maternal support for resisting such control appears to have been regularly sought and given.

Interviewer: What would you be doing if things hadn't changed?

Angie: Nothing, I would have had a permanent verruca

Paul: Yes (laughing) that is what I was going to say; I had letters for a verruca all the time. People used to go round asking if any one in the class would write it for them. Remember that? (To girl)

Melanie: Yeah! My mum used to write period letters for me. She thought it was awful as well that we had to wear those skirts and shower.

Stephanie: Yeah mine did too, periods every week!

Prior to the implementation of the modified programme of PE, participation was focused on competitive sports with inclusion in school teams determined exclusively on

excellence in sports performance. The emphasis on competitive success resulted in the majority of respondents reporting feeling that they were constructed both by their teachers and other students as physically marginal individuals, unable to occupy positions of high achievement. Locating themselves on the margins of the lesson, by 'sitting around chatting' (girls) or by 'mucking about' (boys) with friends was one way young people resisted active participation in the lesson, and thereby avoided having to display any weakness in their performance. This strategy of resistance in the short term functioned to prevent stressful exposure as a 'non' performer, however in the longer term such a strategy is likely to serve to preserve their marginalized position. Exclusion from the physically achieving group also resulted in the young people feeling that they had physical identities that their peers perceived as marginal and also 'risky' to be included in sporting activities. A risky physical identity appeared to arise from the emphasis placed on winning, with the result that any one who was might jeopardise a potential win, through poor performance, was a 'risk' as a team member. The following discussion illustrates that having a 'marginal body' and a 'risky' physical identity was an experience that the group felt to be intensely negative and even difficult to acknowledge:

Interviewer: So, tell me what PE was like before any of the new changes?

Adam: You used to have the sporty ones who did everything, nerdy smart ones and then us, the leftovers. (Group laughter) The ones nobody would want in case we did it wrong, lost a point or whatever.

Kirsty: Hey! I just got that he called us leftovers.

Becca: But we were, it was like that.

Kirsty: Yeah I know, I know, but he didn't have to say it out loud, it was so horrible.

Adam: Yeah it was, but my point is that it isn't like that any more, we do get picked and it is all of the team trying to get better.

Three respondents differed (2 girls and 1 boy) from the majority, in so far as they reported that they felt they could perform and had always been active in sporting activities outside of school. However their critique of school based PE was indistinguishable from their peers and they also choose to implement strategies of

resistance, including the adoption of a 'sick body' and a passive location within the lesson

I could do it, I have always done football at my club, so it wasn't that I couldn't play, but I just didn't like it and the teachers shouting at you. I used to get letters the same as every one else. Or turn up and not do much. (Jack)

Accounts from this minority of respondents suggest that the previous prevailing culture within the PE provision of an emphasis on successful performance combined with regulation of the presentation of embodied self may have a more negative impact than peer rejection.

From the perspective of the respondents, all of these embodied discourses; 'the sick body', 'the marginal body' and 'the risky body' were effectively negated by the introduction of the new PE programme. The remainder of the paper will focus on exploring the adolescents' lived experience of the modified system of PE.

Physically performing body

Positive incentives for participation, such as the environmental changes and the rewards system worked to construct an initial enthusiasm for participation. Girls valued having control over what aspects of the PE uniform they wore, felt that the new uniform made them feel physically more comfortable and freed them from concerns over displaying their bodies. A recurring theme throughout all the focus groups was the positive impact of incentives for self-improvement as opposed negative sanctions for losing. The reward system, combined with supportive encouragement from the teachers, served to encourage a view that achievement in physical activity was attainable, even by those who previously believed that they lacked skills and ability. Moving from feeling that they had a non-performing marginal body to a performing and achieving physical identity was

recounted as a dramatic and celebratory experience. The impact of the revelation that they could achieve physical success is illustrated by the 'wow factor' described below:

Our netball team is awful, absolutely awful. In Year 7 and Year 8 we used to get shouted at if we lost and it was like that's not fair, we know we're awful but you don't have to tell us! But like when we had Mrs Falk she was like 'If you get ten goals in this game we'll have a burger on the way home and we were like right, let's get the ten and we got like eleven goals and we were like wow! So we did have fun with things like that, it was like an incentive. (Chloe)

The perception of the students was that the teachers would offer praise for performing well, but also be willing and able to provide feedback to improve skills. Receiving praise and appreciation from the PE teacher played a significant role for the young people in terms of enhancing their physical self-confidence, as well as negating the construction of an inadequate physical identity. Instead of being located on the periphery of the lesson as a mass of relatively invisible non-participants they became, through the positive attention of the teachers, individuals with abilities and development needs.

Interviewer: Can you give me an example of how the PE teachers treat you now in a PE lesson?

Ruth: like we're doing basketball at the moment and she [PE teacher] does treat you as an individual as well, like if we're doing a massive practice thing she'll like shout out 'Oh well done' to a certain person, she'll like watch everyone and tell you if you're doing it wrong but like in a nice way and then tell you about if you're doing it good as well. So she gives you confidence.

Tom: Yeah, they [teachers] pay attention to what you're doing right rather than everything you're doing wrong.

Being made to feel 'good enough' as opposed to 'less than' was not only an important confidence builder for the girls, but also a protective factor against non-participation and thereby developing an invisible and passive identity within the classroom. The invisibility and marginalization created by portraying passivity or a sick body was replaced with the

perception that they had both a more central location within the lesson and a contribution to make.

Interviewer: Tell me how PE lessons differ from what they used to be like?

Karen: Like in our PE lessons before, like us lot used to be pretty quiet and we'd just like stay out of it but since like Jenny (PE teacher) came here we've been more confident in what we do.

Yvonne: Yeah, she can't shut us up now!

Karen: They give you confidence, cos they make you believe in yourself.

The included body

Respondents valued the opportunity to undertake a range of activities of their own choosing and to express preferences that were acted upon by teachers. The adolescents also felt that through engaging in new activities they were able to display previously hidden physical abilities. The display of new found physical abilities appeared from the interaction in the interviews to have impacted positively on peer perceptions. As the following discussion illustrates, by displaying new physical skills an individual shifted from being a marginal quiet person, to being perceived within the peer group as a more multi-dimensional individual, with qualities that were valued by their peers.

Laura: Some people are quite surprising when it comes to dance or new things.

Interviewer: Surprising?

Laura: Well like, say there's this little girl that sits away from everyone but as soon as she gets on the dance stage or floor and kind of changes personality wise.

Holly: They show you things that you didn't know could be done.

Paul: Oh you mean Amy's little sister? Yeah she is good and you would never think it to look at her, would you?

Holly: You see, when you are dancing, it brings out things in people that you would never have seen before. You think I never knew they could do that. The quietest people suddenly do really great things.

While the girls spoke of increased self-confidence as the main gain from the new programme, boys tended to speak of a reduction in aggressive interactions with male peers. Research has suggested that among adolescents and especially girls, the fear of

being 'embarrassed' by poor performance or 'letting the team down' was a negative aspect of team sports [13, 15]. However for boys, team sports can also be felt to be highly problematic with direct physical or verbal abuse being perceived as a likely repercussion for those not displaying masculine physical prowess. Apart from gaining a sense of value within the new lessons, the previously physically marginalized students also perceived that a culture shift had occurred within the school teams. This shift consisted of change towards a more cooperative and supportive atmosphere; one that no longer adopted a victim blaming approach that defined their embodied selves as 'risky'.

*I have actually joined the football team now, because all the violence has gone, before it was you lost us the game 'you ****'. It's all your fault!' Then with the new teachers it is more like we are all in there just trying to get better at it. No one is to blame. Now it is just worth doing. (Tom)*

Although the perspectives of the 'popular, most sporty' members of the team were not examined there was a perception from our previously inactive respondents that a culture shift had truly occurred. In particular some of the informal and more stigmatising behaviours such as, 'being picked last', had been replaced by more inclusive practices.

*Interviewer: You said people in the teams are different now. How do people treat you differently?
We were doing volleyball and we used to always see who would be last, but quite often they pick us first now, which is a big difference and the popular people actually make you feel welcome. (Molly)*

In contrast to previous research [31], the girls also appeared to be unconcerned about negative sanctions in relation to sports performance from their male peers, requesting more 'intermixed sports'. The boys in the focus groups were also supportive of such an approach. Although the small number of boys in the focus-groups and their mixed gender composition may have been a factor in the presentation of such views, the

potential of PE programmes to positively impact on gender relations warrants further exploration.

One additional element that may have been a factor in facilitating a more inclusive culture, was the emphasis on skill sharing that participation in the junior sports leadership programme created. About a third of the group had participated in this scheme, whereby they organised and led the teaching of physical skills to younger children. This programme was viewed as providing valuable confidence building experiences including the opportunity to work with others outside of their friendship groups. A number of respondents also emphasised the way that the programme has encouraged them to think about not only how to share skills but the value of doing so:

Interviewer: You said that you enjoyed the leadership programme can you give me an example?

You have to get inside the little ones heads and think how do I explain this to them, it makes you realise how to pass on a skill, the knowledge. It feels really good. (Maisey)

Empowerment for Active Lifestyles

Part of the reason for public health policy promoting PE is that participation might lead to a long-term involvement in community based sports programmes. Previously the connection between school PE and community sports programmes has been under explored. Although participation in community sports/activities for girls has been found to occur in spite of negative experiences of school based physical education [31]. In this study, the students felt that their experience of PE was a factor in increasing their levels of participation in external or community sports/activities. In particular, those who had not previously been involved in any external activities felt that their experiences of school based PE now provided the psychological and emotional resources to achieve high levels of participation, in community based programmes and clubs.

Interviewer: So if the changes hadn't been made what activities do you think you would be doing?

Laura: I wouldn't have been doing anything at all

Interviewer: But would you be doing activities out of school?

Laura: No I don't think I would. I would have given up. Like with my dance I have to do loads of performances and shows and exams and I would have just given up, but for the teachers here who make you feel that you can do stuff and get up on that stage.

Holly: In dance there are loads of exams and shows and it gets harder and harder and they are always encouraging you here. 'You can do it, get up there,' that sort of thing.

A final striking feature of the accounts from the student was the way that confidence in their newfound physical identities had created future expectations of continued participation in physical activity in an economic capacity. For 13 members of the group their experiences of school based PE had provided them with desire and inspiration to pursue future careers in either education (n=9), as PE teachers, or the leisure industry. as aerobics instructors (n=4).

Discussion

This article reported on a small-scale case study in one location, this study was exploratory in nature and sought to further the understanding of adolescents' experiences and attitudes towards physical activity. The study was limited by the reliance on a purely convenience sample of adolescents at the participating school[40]. Theoretical sampling to include those few students who still remained PE adverse would have been ideal, but was not possible due to non-consent by those students. The exploration of the views and experiences of those who remain PE adverse despite the development of adolescent-centred PE programmes requires further exploration. This study focused on a group of adolescents whose experiences are of particular relevance to the development of physical activity and health promotion interventions for

young people, notably those who had successfully made the transition from inactivity to activity. The findings of this study concur with previous research that, a PE programme which is intensively involved in the surveillance of young peoples bodies and exclusively prioritises successful performance creates a physically marginalized sub-group of non-participants [32]. In situations where poor attainment in physical activity might expose young people to risk of adult or peer sanctions non-participation can be seen as rational, protective, health behaviour. The accounts from the adolescents involved in this study suggest that effective health promotion strategies for adolescents, are likely to be those that incorporate an understanding of physical activity decision-making as a rational act [41], rather than simply a feature of sedentary inclined adolescent cultures.

The findings of this study provide an illustration of the relevance for health promotion interventions of understandings derived from the new social studies of childhood [26].

Previous research, which has used measures of intrinsic motivation and 'task and work avoidance ' (e.g. 'wanting to try and improve' vs. 'wanting to work as easily as possible'), has demonstrated that providing choice and giving young people influence over the way their PE lessons are conducted can increase motivation and willingness to 'make an effort' in PE [24]. This study supports those findings, and further illustrates that such attitude changes can lead to a commitment to participation.

The conceptualisation of the child as an active social agent, allowed for the data to uncover how a PE programme based on an understanding of the priorities of adolescents was critical to increasing PE participation rates and achieving a transition from inactivity to activity. Moreover, by examining the meaning PE from the perspective of the adolescent, the implications for emotional well being, peer relations and involvement in community sports programmes were made available for exploration.

In terms of the impact of the new PE programme examined in this article, the invisibility and marginalization created by portraying a sick body was replaced with the perception among our respondents that they had a more central location within the lesson and were held in higher esteem by their peers. Through reportedly, eliminating teacher criticism for weaker physical performance and instead valuing commitment and participation, the PE programme nullified the categorisation of young people according to negative physical identities. Consequently categories such as 'left over' ceased to have salience among the year group. Instead, an included physical identity was created for the adolescent respondents with a perceived positive impact on their emotional well-being and increased acceptance among peers. The potential for physical activity interventions to have positive impacts on adolescent peer group behaviour may be particularly valuable for the UK context, as a survey across 35 countries in Europe and north America [42] found that adolescents in England (aged 13 and 15), were less likely than young people from any other country to feel that their peers were 'kind and helpful'. Health promotion interventions that could enhance peer support are likely to have implications for the emotional well being of young people. The potential of physical activity interventions to achieve a positive change in peer group interactions warrants further examination and study. The relationship between increased physical activity adolescent-centred PE curriculum and social capital within areas of deprivation is also worthy of detailed consideration.

Finally, this study adds to our knowledge of the operation of gendered relations within school based physical activity. Research with adolescent girls has identified how physical education has failed to provide young women with experiences to "*develop physical identities as other than the antithesis of men less able, less strong and less competitive.*" [31]. This study explored how implementing strategies aimed at improving girls experiences of school based PE can have profound implications for the construction

of physical identity and self-confidence. Although we were able to include only a small number of boys, we also highlighted how both the adolescent girls and boys felt they had been negatively defined as being less than physically accomplished. Moreover the changes to PE were also perceived to reduce the significance of dominant masculine forms of physical identity within the school teams assisting the boys to participate in ways they found personally rewarding.

A way to strengthen the evidence for changes to the delivery of PE in order to enhance the participation of adolescents and also facilitate their commitment to active lifestyles, would be to employ the Medical Research Council (MRC) framework for complex interventions[43]. The MRC defines a complex intervention as one that is built up from a number of components, which may act both independently and inter-dependently.

Adolescent physical activity within the school environment would seem to conform to a complex intervention where the components might be the behaviours, views and experiences of young people, the organisation of the school, the curriculum, the involvement of educators, parents and other professionals such as the school nurse. In order to try and determine how each of these components interact with each other synergistically and which components may be more or less significant in determining outcomes, the MRC suggests a framework that consists of 5 phases[43]. Each phase of the framework is critical to undertake before moving to the next, in order to design a definitive randomised controlled trial.

We would suggest that the early phases of theory exploration and modelling the proposed intervention using qualitative methods has been undertaken via our study and others that have identified adolescent critiques of PE [23, 24, 31, 35]. The MRC feasibility phase, of taking the intervention into a school setting and investigating the effect of the intervention on a relatively small sample of school children, has in part been undertaken via our study. Further small scale feasibility studies to consider the impact on

other ages, a more ethnically diverse population and different school setting with a different teaching team, would be valuable. A full-scale, multi-factorial, randomised controlled trial modelling an adolescent-centred PE programme on a much larger scale across a range of school settings could then be undertaken.

Conclusion

This study suggests that for both adolescent boys and girls' significant social meanings are attached to the character of their physical identities and these can exert powerful influences on behaviour. However, inactive young people's physical identities from this study do not appear fixed, but possess sufficient fluidity such that facilitation towards an active lifestyle can occur. Committed participation was dependent not simply on a wider choice of activities, but also upon recognition of the need for structural and cultural changes that positively addressed the construction of physical identities. Consequently, effective health promotion interventions to address sedentary behaviour are likely to commence with an understanding not only of the benefits of physical activity, but also the potential emotional risks and benefits of participation from the perspective of the adolescent. Findings from this study, suggest that physical education based on such an understanding will offer adolescents benefits that can translate from the physical-self to the social, with important positive implications for the well being of young people.

Acknowledgements

We would like to thank the students and teachers at the study school for their time and involvement in the study; we hope we have been true to their experiences. Thanks also go to Wendy Wills and Sally Kendall for commenting on drafts of the paper and to the LEAP steering group for their support throughout the study. We would also like to thank the anonymous reviewers for their helpful and supportive comments. The study was funded by the Hertfordshire Primary Care Research Network (HertNet).

References

2. WHO, *World Health Report 2002*. 2002, World Health Organization: Geneva.
3. Aarnio, M., U.M. Kujala, and J. Kaprio, *Associations of health-related behaviors, school type and health status to physical activity patterns in 16 year old boys and girls*. Scandinavian Journal of Social Medicine, 1997. **25**(3): p. 156-167.
4. Kirkcaldy, B.D., R.J. Shephard, and R.G. Siefen, *The relationship between physical activity and self-image and problem behaviour among adolescents*. Soc Psychiatr Epidemiol, 2002. **37**: p. 544-550.
5. Health Education Authority, *Young and active? Young people and health-enhancing physical activity - evidence and implications*. 1998, Health Education Authority: London.
6. Department of Health, *Health survey for England 2002: The health of children and young people*. 2002, Department of Health: London.
7. BMA, *Adolescent Health*. 2003, British Medical Association Board of Science and Education: London.
8. Robinson, T., *Reducing children's television viewing to prevent obesity - a randomized controlled trial*. American Medical Association, 1999. **282**: p. 1561-1567.
9. DfES and DCMS, *Learning through PE and sport*. 2003, Department for Education and Skills: Annesley.
10. Goran, M., et al., *Developmental changes in energy expenditure and physical activity in children: evidence for a decline in physical activity in girls prior to puberty*. Pediatrics, 1998. **101**: p. 887-91.
11. Kelder, S., et al., *Longitudinal tracking of adolescent smoking, physical activity and food choice behaviours*. American Journal of Public Health, 1994. **84**(7): p. 1121-6.
12. Sallis, J., J. Prochaska, and W. Taylor, *A review of correlates of physical activity of children and adolescents*. Medicine and science in sports and exercise, 2000. **32**: p. 963-975.
13. Coakley, J. and A. White, *Making decisions: Gender and sport participation among British adolescents*. Sociology of Sport Journal, 1992. **9**: p. 20-35.
14. Crocker, P.R.E., R.C. Eklund, and K.C. Kowalski, *Children's physical activity and physical self-perceptions*. Journal of Sports Sciences, 2000. **18**: p. 383-394.
15. Mulvihill, C., K. Rivers, and P. Aggleton, *Views of young people towards physical activity: determinants and barriers to involvement*. Health Education, 2000. **100**(5): p. 190-199.
16. Stahl, T., et al., *The importance of the social environment for physically active lifestyle - results from an international study*. Social Science and Medicine, 2001. **52**: p. 1-10.
17. Rees, R., et al., *Young people and physical activity: A systematic review of research on barriers and facilitators*. 2001, EPPI-Centre, University of London: London.

18. Vilhjalmsson, R. and G. Kristjansdottir, *Gender differences in physical activity in older children and adolescents: the central role of organised sport*. Social Science and Medicine, 2003. **56**: p. 363-374.
19. Vilhjalmsson, R. and T. Thorlindsson, *Factors related to physical activity: a study of adolescents*. Social Science and Medicine, 1998. **47**(5): p. 665-675.
20. Department for Culture Media and Sport, *A sporting future for all*. 2000, Department for Culture, Media and Sport: London.
21. Reeves Tuttle, C., *Review of Teen Jump Start Programme: Educational Materials in Review*. Journal of Nutrition, 2002. **34**(1): p. 67.
22. California Department of Health. *CPL California Project LEAN Jumpstart lesson plans*. 2006 [cited 2006 26.1].
23. Fairclough, S. and G. Stratton, *Improving health-enhancing physical activity in girls' physical education*. Health Education Research, 2005. **20**(4): p. 448-457.
24. Goudas, M., et al., *It ain't what you do it's the way that you do it! Teaching style affects children's motivation in track and field lessons*. The Sport Psychologist, 1995. **9**: p. 254-264.
25. Toren, C., *Making History: The significance of childhood cognition for a comparative anthropology of mind*. Man, 1993. **28**(3): p. 461-78.
26. James, A., C. Jenks, and A. Prout, *Theorizing childhood*. 1998, Cambridge: Polity.
27. Christensen, P. and A. James, eds. *Research with Children: Perspectives and Practices*. 2000, Falmer Press: London.
28. Mayall, B., *Towards a sociology of child health*. Sociology of Health and Illness, 1998. **20**(3): p. 269-288.
29. Marshall, S., et al., *Clustering of sedentary behaviors and physical activity among youth: a cross national study*. Pediatric Exercise Science, 2002. **14**(401-417).
30. Bourdaudhuij, I., et al., *Stages of change for physical activity in a community sample of adolescents*. Health Education Research, 2005. **20**(3): p. 357-366.
31. Flintoff, A. and S. Scraton, *Stepping into active leisure? Young women's perceptions of active lifestyles and their experiences of school physical education*. Sport, Education and Society, 2001. **6**(1): p. 5-21.
32. Garrett, R., *Negotiating a physical identity: Girls, bodies and physical education*. Sport, Education and Society, 2004. **9**(2): p. 223-237.
33. Prout, A., *Sickness as a dominant symbol in life course transitions: an illustrated theoretical framework*. Sociology of Health and Illness, 1989. **11**(4): p. 336-59.
34. Wellard, I., *Men sport, body performance and the maintenance of 'exclusive masculinity'*. Leisure Studies, 2002. **21**(3-4): p. 235-247.
35. Robertson, S., *"If I let a goal in, I'll get beat up": contradictions in masculinity, sport and health*. Health Education Research, 2003. **18**(6): p. 706-716.
36. SportEngland, *Step into sport: Awards for young sports leaders*. 2005, Sports England: London.
37. Boyatzis, R., *Transforming qualitative information: Thematic analysis and code development*. 1998, Thousand Oaks, CA: Sage.
38. Kitzinger, J., *Qualitative research: Introducing focus groups*. British Medical Journal, 1995. **311**(29 July): p. 299-302.
39. Morgan, D. and R. Kreuger, *When to use focus groups and why*, in *Successful focus groups*, D. Morgan, Editor. 1993, Sage: London.
40. Mays, N. and C. Pope, *Rigour in qualitative research*. British Medical Journal, 1995. **311**(8 July): p. 109-112.
41. Backett, K. and C. Davidson, *Rational or reasonable? Perceptions of health at different stages of the lifecourse*. Health Education, 1992. **51**: p. 55-59.

42. Currie, C., et al., *Young People's Health in Context: Health Behaviour in school-aged children (HBSC) study: international report from the 2001/2002 survey*. 2004, The World Health Organisation: Copenhagen.
43. MRC, *A framework for the development and evaluation of RCT's for complex interventions to improve health*. 2000, Medical Research Council: London.